Briefing Memo
May 2002

Introduction

The McGrady Hog farm #1 has been documented as a CAFO which has discharged process wastewater. The facility was required to seek an NPDES permit as part of an enforcement action. The McGrady Hog Farm #1 has applied for a National Pollutant Discharge Elimination System (NPDES) Permit in conformance with the enforcement action. NPDES permit No. INA000101 is being proposed to regulate the wastewater generated at this facility. A five (5) year permit is proposed.

Facility Description

McGrady Hog Farm #1 is an existing facility engaged in swine breeding and pig production located on Twin Lakes Road, Hillsboro, Indiana in Fountain County. The production facility is 0.32 acres and confines approximately 627 animals. Manure and process wastewater are land applied on crop land.

Wastewater Sources

The wastewater from this facility is the liquid manure produced by the animals. This facility utilizes earthen lagoons and concrete pits beneath slotted floors for the collection and storage of liquid manure.

Receiving Stream

Confined Animal Feeding Operations are not authorized to discharge manure or process wastewater into the waters of the state. Therefore, no stream shall be designated as the receiving stream.

Historical Information

The McGrady hog farm was cited for a violation of IC 13-30-2-1, IC 13-18-4-5, 327 IAC 2-1-6(a)(1), and 327 IAC 5-2-2 on August 24, 1998. The next violation that was cited occurred on August 26, 1998, it was a violation of the Confined Feeding Approval, and IC 13-30-2-1.
The last violation occurred on February 19, 1999, which McGrady hog farm violated the Water Quality Standards 327 IAC 2-1-6(a)(1), as well as IC 13-18-4-5, IC 13-30-2-1, 327 IAC 5-2-2, 327 IAC 5-3-2, 327 IAC 5-4-3 and the Confined Feeding Approval.

Permit Conditions Rationale

Part I. A. Effluent Limitations and Discharge Prohibitions

In accordance with 327 IAC 5-4-3(b)(2)(B)(i), the permit requires no discharge of process wastewater except in the event of a twenty-five(25) year, twenty-four (24) hour wet weather event.

Indiana water quality standards require that discharges to a surface water shall meet the minimum requirements in 327 IAC 2-1-6. Part I. A. 3. of the permit contains requirements from 327 IAC 2-1-6(a). Compliance with these requirements in combination with the other requirements of this permit will be considered as meeting Indiana Water Quality Standards.

Part I. B. Performance Standards

In accordance with 327 IAC 5-9, the permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The performance standards in the permit are based on the requirements in the Confined Animal Feeding Operation rule 327 IAC 16-3-1. The Land Application rates specified in the permit are in accordance with the Indiana FOTG 590 Standard.

Part I. C. Operational Requirements

In accordance with 327 IAC 5-9, the permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The manure storage structure requirements are based on the Confined Animal Feeding Operation rule 327 IAC 16-9-1(c). The requirements for Freeboard are based on 327 IAC 16-8-5(a). The Self monitoring inspections requirements are based on Confined Animal Feeding Operations Rule327 IAC 16-9-1(e). Uncovered liquid manure storage structure requirements are based on the Confined Animal Feeding Operational rule 327 IAC 16-9-1(f).

Part I.D. Best Management Practices for Land Application of Manure

In accordance with 327 IAC 5-9, the permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The manure application rates are based on the Confined Animal Feeding Operation Rule 327 IAC 16-10-2. The manure application activities are based on the Confined Feeding Animal Operation 327 IAC 16-10-3. The requirements of the Manure applications setbacks are based on the Confined Animal Feeding Operation Rule 327 IAC 16-10-4.

Part I. E. Special Conditions

In accordance with 327 IAC 5-9, the permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The limitations for Manure Quality are based on best professional judgement (BPJ) of the technology and corresponding limitations equivalent to the best conventional pollution control technology (BCT).

The Spill requirements are based on two separate sections of the Confined Animal Feeding Operation 327 IAC 16-9-4 ; reporting; containment, and response: in special areas 327 IAC 2-6.1 The language for Rainfall conditions are from the EPA Guidance Manual and Sample permit. Measuring rainfall tells facility when a 25-year 24-hour wet weather event has taken place. The requirements for employee training are in accordance with Best Management Practices: Applicability Rule 327 IAC 5-9-2. The language for this section comes directly from EPA Guidance Manual and Sample permit.

Part I. F. Schedule of Compliance

The permittee has a two-year schedule of compliance as outlined in Part I.F. of this permit in which to achieve compliance with the Indiana FOTG 590 Standard.

Part II. A. Self Monitoring

In accordance with 327 IAC 5-9, the permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The owner/operator shall inspect all waste management systems to ensure compliance and is based on the Confined Animal Feeding Operation 327 IAC 16-9-1(e). The self inspection records are based on the Confined Animal Feeding Operation Rule 327 IAC 16-9-5(b)(1).

Part II. B. Operating Record Keeping

In accordance with 327 IAC 5-9, the permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The requirements of operating record keeping are based on the Confined Animal Feeding Operation Rule 327 IAC 16-9-5.

Part II. C. Reporting Requirements

In accordance with 327 IAC 5-9, the permit contains best management practices designed to prevent a discharge of wastewater to waters of the state. The requirements of Reporting requirements are based on the Confined Animal Feeding Operation Rule 327 IAC 16-9-5(b)(3).

Part II. D. Notification of Discharges from Retention Structures and Improper Land Application

The requirements for Notification of Discharges from Retention Structures and Improper Land Application are in accordance with EPA Guidance Manual and Sample permit for Confined Animal Feeding Operations.

Part II. E. Monitoring Requirements for Discharges from Retention Structures

The requirements of Monitoring requirements for Discharges from Retention Structures are in accordance with EPA Guidance Manual and Sample permit for Confined Animal Feeding Operations.

Part II F. Additional Monitoring Requirements

The requirements of Additional Monitoring requirements section are in accordance with EPA Guidance Manual and Sample permit for Confined Animal Feeding Operations.

Part III. Standard Permit Conditions

The conditions contained in Part III of the permit are taken from 327 IAC 5 and must be included in all NPDES permits in accordance with U.S. EPA rules and the Clean Water Act.

Prepared by Chris Rousch.

Attachment I

Post Public Notice Addendum

The following is a summary of comments submitted from numerous parties received in response to the 2nd Draft McGrady CAFO NPDES permit and the response to those comments by IDEM:

Part I.A.1:

Comment No. 1 We understand the Department's intent behind the statement "…shall not have any point source discharges to surface waters of the state…" in its desire to protect surface waters. However, this unqualified prohibition unnecessarily precludes future consideration on innovative solutions that may be authorized under other CWA provisions relating to specifically permitted industrial waste treatment facilities. In order to preserve this innovation path for the future, we ask that the clause state that "this permit does not authorize any CAFO point source discharges to surface waters of the state."

Comment No. 2 We believe that in the permit language prohibiting point source discharges IDEM must clarify that the permit references contaminated water, which has come in contact with some of the areas or substances noted by the permit. As the section currently stands, we can see circumstances where discharging clean storm water from the facility may be prohibited because of questions surrounding when that water is clean enough to meet state water quality standards. By referencing contaminated water as the issue in the section, clarity will be seen in the areas in which IDEM intends to control.

Comment No. 3 There is still some ambiguity with respect to the types of point source discharges regulated under the permit as discussed in IDEM's responses to the previous comments 1 & 2 and 10 of the briefing memo. We suggest that in the first sentence the words "which has been contaminated" be inserted before the word "from" of that sentence. This will clarify that only contaminated point source discharges are regulated.

Comment No. 4 In reviewing IDEM's responses to the previous comments 1& 2 and 10 contained in the briefing memo for the revised draft permit, there still appears to be ambiguity with respect to the types of point source discharges regulated under the permit. We would suggest that in the first sentence of this provision the words "which has been contaminated" be inserted before the word "from" in the second line of that sentence. This will help clarify that only contaminated point source discharges are regulated.

Comment No. 5 Please clarify for us if a manure treatment system would be defined as a "manure handling or storage system."

Response to Comments No. 1,2,3,4,&5:

IDEM addressed these comments by making the following changes in Part I.A.1:

> The permittee shall not have any *contaminated* point source discharges to surface waters of the state from any animal confinement facilities, manure storage systems, *manure treatment systems,* or areas used for the manure handling or storage of any raw materials, intermediate products, final products, or dead animals used in or resulting from the production of animals. The manure storage facility must be designed and operated to hold all manure generated by the confined feeding operation and storm water contaminated from contact with manure or above mentioned products, materials or byproducts.

Comment No. 6 "The manure storage facility must be designed to hold all manure generated…" does not give a time frame for which this storage must be designed. We suggest that the Department remain consistent with the CAFO rule and clarify the design standard to be for 180 days storage.

Response to Comment No. 6:

> Not all of the farms required to get an NPDES permit are designed for 180 days storage capacity. IDEM does not require existing farms to retrofit their farms to meet those rule requirements.

Part I.A.2:

Comment No.7: We believe that the Department must clarify for the permittee how they might go about rebutting an accusation from the Department. Please identify any possible avenues.

Response to Comments 7:

If a farm has a discharge and there is any debate on whether it is a catastrophic rainfall event, the farm will need to have proof that it was a qualifying rain event, such as monitoring their own rainfall with a gauge on-site and/or confirming this with the National Weather Service.

PartI.B.4.a:

Comment No.8: Please clarify how the Department determines if a material is "threaten(ing) to enter the waters of the state."

Response to Comment No. 8:

Each CAFO is different, IDEM cannot tell each farm how to evaluate everything at their facility to see if there are items that will "threaten to enter waters of the state". Some areas need to be monitored closely including but not limited to:

- Land application equipment: the operator must apply manure in a manner consistent with the guideline using their own judgement to determine what might be threatening.
- Manure handling structures failure
- Proximity to a water of the state
- Free board level of the manure storage facility

Part I.B.5:

Comment No.9: The Department should specify which NRCS 590 standard they would like the producer to follow, as there are at least two. If the Department intends to use the Indiana FOTG 590 standard, then this should be specified. As part of the permit conditions, the Department should allow for application of inorganic nitrogen to supplement the nitrogen supplied in applied manure. Compliance should be metered by reference to actual, overall nitrogen load measured at soil surface, from all application sources. A common practice, even with commercial nitrogen applications in the fall, is to conduct the pre-side dress soil nitrate test after corn has emerged to determine if additional N is required for completion of the corn crop. Considerable N can lost during surface application after drying on the soil surface. Even with incorporation of manure, some N can be volatilized and/or leached that must be accounted for in determining the available N rate for application. These losses are greatly affected by soil conditions, temperature, and other climatic factors. For example, most research has shown about 30%-40% loss of N during spraying due to atomization at the nozzle, before liquid even contacts the soil. There are then additional losses of another 50% or more during drying within the first 24 to 72 hours. Actual losses depend greatly on air movement, humidity, temperature, pH of manure, spray nozzle size, etc. The Department must understand this and allow additional inorganic N fertilizer application subsequent to manure application. If this not allowed, there will be the disastrous result of very N-deficient corn. In summary, the way this paragraph in the draft permit is written currently, a producer would risk violating his NPDES permit if he were to add nitrogen after manure application to meet crop needs.

Comment No. 10: Under the permit "Requirements" section dealing with performance standards and operational requirements, several references to the NRCS Conservation Practice Standard #590 are made. Utilizing the NRCS 590 Standards will constitute a major change for many operations concerning land application rates and the number of acres required for land application. Recognizing that these rates under which the operation was approved will require time for individual operators to implement these changes.

Comment No. 11: We recommend that the operator be asked to amend his manure management plan to reflect these changes and allowed a minimum of two (2) years to implement operational compliance with the NRCS 590 Standards. This would allow operators the necessary time to make these changes and to maintain compliance with the permit.

Response to Comments No. 9, 10, & 11:

IDEM addressed these comments by making the following changes:

I.B.5. Manure must be applied at rates based on results of manure and soil analyses and the Indiana FOTG 590 Standard. If the rate of application is based on nitrogen as the limiting factor, the potentially available nitrogen must not exceed the nitrogen requirements of current or planned crops of the upcoming growing season as documented in the operating record. A schedule of compliance, Part I.F. of this permit, has been given to achieve compliance with the Indiana FOTG 590 Standard.

IDEM also adds a section to the permit I.F:

F. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the Indiana FOTG 590 Standard in accordance with the following schedule:

   a. The permittee shall submit a written progress report to the Solid Waste Permits Section of the Office of Land Quality (OLQ) nine (9) months from the effective date of this permit. The progress report shall include a description of the method(s) selected for meeting the newly imposed Indiana FOTG 590 Standard, in addition to any other relevant information. The Indiana FOTG 590 Standard is deferred for the term of this compliance schedule, unless the it can be met at an earlier date. The permittee shall notify the Solid Waste Permits Section of OLQ as soon as the newly imposed Indiana FOTG 590 Standard can be met. Upon receipt of such notification by OLQ, the Indiana FOTG 590 Standard will become effective. The Indiana FOTG 590 Standard must be met no later than 24 months from the effective date of this permit.

   b. If for any reason construction is required to meet the new effluent limits, initiation of construction shall commence no later than eighteen (18) months from the effective date of this permit.

   c. The permittee shall comply with the Indiana FOTG 590 Standard no later than twenty-four (24) months from the effective date of this permit.

2. If the permittee fails to meet any of the above actions in the foregoing schedule by more than fourteen (14) days, the permittee shall submit a written notice of noncompliance to the Compliance Evaluation Section of Ag and Solid Waste Compliance Section OLQ stating the cause of noncompliance, any remedial action taken or planned, and the probability of meeting the remaining terms of the schedule.

Part I.B.5 and I.D.2.c

Comment No.12: The requirement to utilize NRCS Conservation Practice #590 for determining land application rates constitutes a drastic deviation from long established IDEM policy and the specific requirements of 327 IAC 16-10-2(b). Such a requirement which in effect establishes a phosphorus standard for land application rates, will throw many producers into immediate non-compliance, and render their previously issued Confined Feeding Approvals meaningless and void. This requirement must be stricken, and no such drastic measures should be taken until all stakeholders have had an opportunity to provide input on this issue, and been allowed ample time to secure sufficient land application acres to comply with any new requirement.

Comment No.13: In the draft NPDES permit, it references the NRCS Conservation Practice 590, which addresses phosphorus. The Confined Feeding Operations (CFO) Program utilizes nitrogen as the limiting agronomic factor. Thus, we recommend the draft align with the CFO rule and reference nitrogen based upon rates and acreage requirements of the rule. The NPDES permit should not address phosphorus.

Response to Comments No.12 & 13:

IDEM believes Indiana FOTG 590 Standard provides a reasonable approach to the risks associated with high soil phosphorus levels. IDEM will recognize the development of a CMNP for a CAFO as an acceptable farm practice. IDEM believes imposing the Indiana FOTG 590 Standard on the permit holders is prudent. IDEM is giving the permittee a 24 month schedule of compliance, to adhere to the new practices.

Part I.D.1.a

Comment No.14: In the past, minimum acreage for manure application was determined by the IDEM guidance document for the Confined Feeding Program. A Confined Feeding Approval could not be issued to an applicant for an NPDES permit unless that applicant had previously demonstrated sufficient acreage to receive a Confined Feeding Approval. We are concerned that this Part I.D.1.a. could potentially require greater acreage than required under the Confined Feeding Program, thus resulting in a voidance of the applicants Confined Feeding Approval. It is our request that no additional acreage for manure application be required under the NPDES permit than is required under the Confined Feeding Approval.

Comment No. 15: For the same reasons as set forth regarding Parts I.B.5 and I.D.2.c., the requirement to determine and maintain land application acres based upon NRCS Conservation Practice Standard #590 must be stricken. Producers have had their land application acres determined and approved by IDEM based exclusively upon a nitrogen standard as set forth at 327 IAC 16-10-1(a). Unilaterally imposing a phosphorus standard, which could require up to three times the umber of acres as would have been required under a nitrogen standard, without allowing any stakeholder input or advance planning by producers, is totally unacceptable. If such a change is to be initiated, it must be done so in compliance with 327 IAC 16-7-5-(a)(2), with sufficient stakeholder input, and with appropriate transition periods.

Response to Comment No.14 & 15:

IDEM addressed these comments by making the following changes:

The following is deleted out of the permit:

1. ~~Required Minimum Acreage~~

~~a. A minimum number~~ of ~~acres for manure application must be maintained and documented in the operating record at all times based Indiana FOTG 590 Standard:~~

~~b. Any acreage identified as part of the minimum required acreage for the application of manure that is not owned by the owner of the confined feeding operation must be documented in the operating record via land use agreements signed by the property owners on whose property the manure will be applied.~~

~~c. The calculation of acreage identified as part of the minimum required acreage for manure application must take into account setbacks relative to site characteristics and method of land application.~~

~~d. Copies of any written waivers related to reduction of the property line setback distances must be kept in the operating record as required in Part II.B. of this permit.~~

The following was added to the permit:

I.D.4.d:

d. The property line setback distances specified in subsection (a), Table 1, may be waived in writing by the owner of the adjoining property without the requirement to modify this permit. Waivers must be kept in the operating records.

II.B.2.d:

d. Property line waivers.

IDEM also responds:

When deemed appropriate IDEM will provide the permittee with a schedule of compliance to meet the Indiana FOTG 590 Standards.

Part I.D.2.a:

Comment No.16: This line is not necessary as the permit in question is for an existing facility.

Response to Comment No.16:

IDEM addressed these comments by making the following changes:

I.D.1.a. The owner/operator of a ~~new~~ confined feeding operation shall have a soil test and a manure test conducted in accordance with the manure management plan that ~~is~~ *has been* submitted to the commissioner.

Part I.D.2.b:

Comment No. 17: Remove the word “insure” and replace with “enhance” or “augment”. By the nature of the activity, there will be some variability in deliver rates. There is no way a producer can “insure” uniform application.

Response to Comment No. 17:

IDEM addressed these comments by making the following changes:

I.D.1.b. The land application equipment shall be calibrated based on manure and soil test results to ~~insure~~ enhance the ability to apply nutrients uniformly on the site.

Part I.D.3.a:

Comment No. 18: Insert the word “site” after “application”.

Response to Comment No. 18:

IDEM addressed these comments by making the following changes:

I.D.2.a. Manure that is staged at the manure application site is subject to Part I.A. of this permit. Manure that is staged at the manure application site for more than seventy-two (72) hours must be:

Part I.D.3.b.i.A:

Comment No. 19: Please note a suggested grammar change in this section… " unless there is: a barrier (any item that …); or…"

Response to Comment No. 19:

IDEM addressed these comments by making the following changes:

I.D.2.b.1.A. a barrier is any item or surface gradient that contains or directs any contaminated run-off away from the waters of the state, including drainage inlets, ~~including~~ water and sediment control basins, or water wells; or

Part I.D.3.c:

Comment No. 20: "Under constant supervision…" is a requirement that is impossible for a producer to comply with. "Constant supervision" will not prevent equipment failure. Proper operation and maintenance will help minimize the chance an equipment failure. We suggest the Department review previous decisions it has made regarding the need for an operator to supervise spray irrigation equipment.

Response to Comment No. 20:

IDEM addressed these comments by making the following changes:

I.D.2.c.i. under the constant supervision of a person designated by the owner/operator or as specified in the approval; or

Part I.D.3.i:

Comment No. 21: We believe it is very important to take the weather forecast into account when planning for surface application or liquid incorporation of manure or wastewater. In fact, Ross, *et al.* (1979) found that delaying the time between land application and rainfall by one day reduces runoff losses of nutrients in runoff by 80 percent and Daniel, *et al* (1995), found that runoff losses were worst for the first storm event following an application.

Response to Comment No. 21:

IDEM addressed these comments by adding the following section:

I.D.2.i. When planning surface application of manure, the permittee must take into account the weather forecast to avoid applying manure prior to a rain event forecasted within 24 hours.

Part I.E.1:

Comment No. 22: This list is overly restrictive. There are many FDA/USDA/EPA approved as and other products such as “Pit Boss” (products used to make control solids or make liquid slurries more flowable, etc.) used in livestock operations that may find their way into manure. For example, why would a producer need to get permission from IDEM if he wants to use flocculant that will recover P and other nutrients? This stymies innovative practices and solutions for nutrient control. We feel if they are approved products, IDEM should not control their usage by any producer.

Response to Comment No. 22:

IDEM addressed these comments by making the following changes:

I.E.1. Manure Additives

The permittee shall not add ~~any~~ chemicals or other substances ~~than those used for nitrogen stabilization or to control odors or as approved by the commissioner~~ that will render the manure unsuitable for land application.

Part II.A.1:

Comment No. 23 The last sentence of 1 is repeated again in the last paragraph of 2. We feel this redundant.

Response to Comment No. 23:

IDEM addressed these comments by making the following changes:

1. The owner/operator shall inspect all waste management systems for compliance with this permit ~~and the conditions of the Indiana Confined Feeding Approval Letter issued to this facility and , if applicable, freeboard as specified in Part I, C(3) of this permit~~ at least once every two weeks. Completed self-monitoring records must be kept in the operating record described in Part II.B. of this permit.

Part II. B.1.b:

Comment No. 24: We suggest the addition of “establish land application rates of manure” be inserted after “nutrient recommendations”.

Response to Comment No. 24:

IDEM addressed these comments by making the following changes:

II.B.1.b. Results of manure tests. Manure tests must be obtained ~~that provides~~ to provide sufficient information about the manure content to be used in conjunction with soil test results to allow for ~~nutrient recommendations~~ determining application rates for existing or planned crops and be conducted no less than once every three years.

Part II.B.1.c:

Comment No. 25: Please see additional wording suggestion for II.B.1.b.

Response to Comment No. 25:

IDEM addressed these comments by making the following changes:

II.B.1.c. Soil tests for each manure application site. Soil tests must provide sufficient information about the site soil fertility to be used in conjunction with manure tests to allow for ~~nutrient recommendations~~ determining application rates for existing or planned crops and be conducted no less than once every three years.

Part II.B.3.f.(i-iv):

Comment No. 26: Please clarify what detailed information the items i-iv must contain. There is no guidance that we are aware of available through NRCS. The Department should decide what it would need to see in a spray irrigation plan prior to requiring such a plan as part of compliance with this permit. It is our understanding that such a plan is not required at this time, but should be included in the operating records if a plan exists.

Response to Comment No. 26:

This section has been removed from the permit.

Part II.B.5.b,d, and e:

Comment No. 27: We feel that the inclusion of "Individual who perform the analysis" and "analytical techniques" is unnecessary given that if a professional lab is conducting the analysis, this information is retained by the lab. Hence a copy of their report in the record should be sufficient.

Response to Comment No. 27:

IDEM addressed these comments by making the following changes:

II.B.5.b. The ~~individual(s)~~company/farm employee who performed the sampling or measurements;

II.B.5.d. ~~The individual(s)~~ The company/firm who performed the analyses;

IDEM is not making changes to Part II.B.5.e, this provision assures that all facilities comply with 327 IAC 2-1-8, which states: "The analytical procedures used as methods of analysis to determine chemical, bacteriological, biological, radiological quality of waters sampled shall be in accordance with 40 C.F.R. 136, the sixteenth edition of Standard Methods for the Examination of Water and Wasterwater or method approved by the commissioner and the Environmental Protection Agency."

Part II.C.1:

Comment No. 28: If soil tests are only required to be taken every three years, as per I.B.i.c, there should not be a need to report old data to the Department on an annual basis.

Response to Comment No. 28:

IDEM addressed these comments by making the following changes:

II.C.1. The permittee shall submit ~~manure application site soil tests and site~~ a copy of the soil test and the manure test along with the manure application records to IDEM annually.

Part II.D.1:

Comment No. 29: Please clarify how a producer would "…estimate the flow of the water body…". We feel strongly that the most important response to a spill is to contain the spill, not "estimate the flow of the water body".

Response to Comment No. 29:

IDEM agrees and will remove this section from the permit.

Part II.E.1:

Comment No. 30: "Ammonia-nitrogen" should be written "ammonium-nitrogen" and "nitrate" should be "nitrate as nitrogen"

Response to Comment No. 30:

IDEM has addressed these comments by making the following changes:

II.E.1. Analysis of the discharge: All discharges shall be sampled and analyzed. Samples must, at a minimum, be analyzed for the following parameters: total suspended solids (TSS); ammonia-nitrogen ~~as nitrogen~~; ~~TKN as nitrogen~~; nitrate as nitrogen; and pH.

IDEM also responds:

The sum of NH3(aq)+NH4 is to be reported as ammonia. This use is consistent throughout the environmental community even though the ammonium ion usually predominates in natural waters. Furthermore, when NH3(aq)+NH4 is determined by the ion-selective electrode method the solution is made highly basic prior to measurement. The ammonium ion is thereby effectively converted to ammonia and precludes speciation.

Part III.A.4:

Comment No. 31: Allows IDEM to make unlimited permit changes or revocations "for cause". We recognize that this may be standard NPDES language, however, "cause" should be defined so that the permit holder understands what situations can place his permit at risk.

Response to Comment No. 31:

IDEM will make no change to this section. These conditions are applicable to all permits. This wording comes directly from the rules, 327 IAC 5-2-8.

Part III.A.6:

Comment No. 32: Please explain how the Department plans to address contractor relationships.

Respond to Comments No. 32:

Each farm will be responsible to get their NPDES permit in accordance with 327 IAC 5-2-3.

Part III.A.6:

Comment No. 33 We suggest this wording: "The permittee shall furnish to IDEM, within a reasonable time, any information related to the CAFO manure waste management which IDEM may request to determine."

Comment No. 34: Part III.A.6: Center Permit Conditions requires a permittee to provide IDEM with any information that IDEM deems necessary. It should be made clear that this information would have correlation and be connected to the operation of the confined feeding facility and not just any information that IDEM may deem necessary. Any information is open-ended and allows any and all confidential information pertaining to the operation to be made part of the public record. We do not support such an open-ended permit condition.

Response to Comments No. 33 and 34:

IDEM has addressed these comments by making the following changes:

III.A.6. Duty to provide information: In accordance with 327 IAC 5-1-3, the permittee shall furnish to IDEM, within a reasonable time, any information relevant to the collection storage, handling, and application of manure, wastewater, or contaminated stormwater from the operation of the confined feeding facility which IDEM may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to IDEM, upon request, copies of records required to be kept by this permit.

Part III.C.1.b:

Comment No. 35: It was not the intent of the legislature in the adoption of the rule in 1997 to allow records to be copied and taken from the farm regarding the waste management system other than that required for the application and manure management plan that must be submitted every 5 years. Inspectors should have access to, but not copy all records in the file of the CAFO.

Response to Comment No. 35:

No changes will be made to this section since these provisions are in accordance with 327 IAC 5-2-8(7).

Part III. D:

Comment No. 36: Delete all references that refer to CEO's and staff, federal agencies and C. municipal, state, etc. that do not relate to a farm operation. This farm is a family farm and this is irrelevant.

Response to Comment No. 36:

No changes will made to this section, it is in accordance with 327 IAC 5-2-22 and is required language in all NPDES permits.

Part III.G.3:

Comment No. 37: Please add the word "be" after "would" and before "needed" in the last sentence.

Response to Comment No. 37:

IDEM addressed these comments by making the following changes:

3. A modification would only be required if the animal population increase would make the farm have more than the one thousand (1,000) animal unit number thus causing the permit conditions to change. No modification would be needed if the farm is already over the one thousand (1,000) animal units.
(One (1) animal unit = two and one-half(2.5) swine)

Comment No. 38: What is the definition of uncontaminated roof drainage? What is the definition of contaminated roof drainage?

Response to Comment No. 38

In Part I.A.1, contaminated stormwater is any water that has come into contact with manure, products, materials, or byproducts from the operation of the CAFO.

Comment No. 39: We feel the inclusion of grain and hay in the list of possible raw materials is overly restrictive. The leaching potential of a hay bale is orders of magnitude less than that of silage.

Response to Comment No. 39

EPA guidance requires these items to be included.

Comment No. 40: IDEM needs to replace the performance standards in place and allow the producer the freedom to manage the operation to the best of his ability to meet these performance standards. Turning in records more often is burdensome and very unlikely to better management.

Response to Comment No. 40:

Producers have freedom within the rules to manage their operation to the best of their ability. Maintaining records on the operation and performance of the facility should result in better management of the facility if the information gathered is utilized to enhance the operational performance. Submitting records to a regulatory program allows the regulatory program to see how the facility is performing. That is one of the basic functions of a regulatory program.